

~~WHAT IS CLAIMED IS:~~

1. A computer management system comprising:

at least two computers connected by a network;

a network operating system (OS) adapted to be executed on each of said computers for controlling data transfer between the computers connected to said network and a file system service on said network;

a manager operating on at least one computer serving as a management computer, of said computers connected by said network, for managing at least configuration and fault of the other computer as a computer to be managed, of said computers connected by said network;

an agent for monitoring information on said computers and controlling said computers in accordance with an instruction from said manager sent through said network; and

an extended board, connected to an I/O bus of said computer to be managed, said extended board including a processor independent from said computer to be managed for monitoring the occurrence of fault in said computer to be managed, sending fault information to said agent through said I/O bus and a service processor (SVP) for controlling a power supply of said computer to be managed by an instruction from said agent.
2. A computer management system according to Claim 1 wherein said managing computer and said computer to be managed are connected by a public line by a modem connected to an

asynchronous interface as an additional function of said network OS, and said manager executed by said management computer controls said agent executed by said computer to be managed having said SVP connected thereto and said SVP to manage said computer.

3. A computer management system according to Claim 1 further comprising:

a plurality of sensors for monitoring the fault of said computer to be monitored, including a sensor for monitoring the stop of a fan, a sensor for monitoring an abnormal temperature of a housing, a sensor for monitoring an error in a power supply unit, a sensor for monitoring a fault in a peripheral device board connected to said I/O bus and a sensor for monitoring a fault in hard disk drives of a disk array; and

signal lines for sending information on the fault from said sensors to said SVP board.

4. A computer management system according to Claim 3 wherein said SVP includes a fault monitor comprising:

fault monitoring means for monitoring various faults of said computer to be monitored by said signal lines from said sensors;

fault event generation means for generating a fault event to inform the fault to said agent through said I/O bus in

response to the occurrence of the fault and sending the fault event to said agent; and

fault logging means for recording the fault event as fault log.

5. A computer management system according to Claim 4 wherein said computer to be managed comprises a device driver for sending the fault occurred in peripheral devices including a disk drive and a network adaptor to said agent as the fault event,

wherein said agent collects the fault event from said device driver or said SVP, records the fault event on a disk as fault history, sends the fault event to said fault logging means of said SVP, records the fault event in said SVP as the fault history and sends fault warning to said manager through said network.

6. A computer management system according to Claim 1 wherein said manager of said managing computer includes a fault manager comprising:

fault warning display means for displaying the fault event sent from said agent on a screen as the fault warning to provide warning to a user; and

fault log display means for sending a fault history acquire request for the record in a recorder of said agent to said agent by an instruction from a user and displaying the fault history sent from said agent on a screen.

7. A computer management system according to Claim 4 further comprising:

main unit OS status monitoring means for periodically communicating with said agent executed on said computer to be managed to determine a normal operation of said computer to be managed and the system-down by the presence or absence of a response from said computer to be managed and requesting a response to said agent in response to a system operation check request of said SVP manager to determine an operation status of the system by the presence or absence of a response from said computer to be managed and informing the status to said SVP manager; and

automatic fault informing control means for connecting to said SVP manager of said managing computer by said synchronous communication control means in response to notification from said main unit OS status monitoring means upon occurrence of critical fault for informing the occurrence of the critical fault.

8. A computer management system according to Claim 1 further comprising:

automatic fault information reception means for displaying a system-down message on a screen in response to the notice from said automatic fault informing control means of said SVP upon occurrence of the critical fault in said computer to be managed;

fault diagnosing means for sending a fault signal line information acquire request from the sensors of said computer to be managed to said fault monitoring means of said SVP by an instruction by the user, sending a fault history acquire request to said fault logging means of said SVP and displaying the acquired fault information on the screen to support the fault diagnosis of the user;

remote reset means for sequentially sending a power-off request and a power-on request to said power control means by an instruction of the user to remotely reset the system; and

system operation check means for sending a system operation check request to said OS status monitoring means of said SVP to acquire information on the operation status of the system and displaying the information on the screen.

9. A computer management system according to Claim 1 further comprising:

a status monitoring circuit in said computer to be managed for monitoring hardware status and fault of said computer to be managed;

an interface in said computer to be managed for allowing said agent to acquire the information on the hardware status from said status monitoring circuit;

fault monitoring means in said agent for acquiring the information on the hardware status of said computer to be managed from said status monitoring circuit through said SVP

or said interface to determine fault state to generate a fault event;

fault log recording means in said SVP for recording the fault event as fault log; and

fault warning generation means in said SVP for sending the fault event to said manager as fault warning.

10. A computer management system according to Claim 1 further comprising:

an interface between said network OS and devices in said computer to be managed, and said agent; and

configuration information managing means in said agent for managing acquirement and setting of information on configuration and status of said network OS and said devices.

11. A computer system comprising:

a computer to be managed, said computer to be managed having a power supply and a service processor controlling the power supply; and

a managing computer, connected to communicate with said computer to be managed, sending a control signal to said service processor, said service processor controlling said power supply in accordance with said control signal.

12. A computer system according to claim 11, wherein said service processor acquires information regarding a fault

of said computer to be managed, and said service processor
sends said managing computer said acquired fault information.

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